Nuclear Regulatory Commission

§ 32.27 Same: Safety criteria.

An applicant for a license under §32.26 shall demonstrate that the product is designed and will be manufactured so that:

(a) In normal use and disposal of a single exempt unit, and in normal handling and storage of the quantities of exempt units likely to accumulate in one location during marketing, distribution, installation, and servicing of the product, it is unlikely that the external radiation dose in any one year, or the dose commitment resulting from the intake of radioactive material in any one year, to a suitable sample of the group of individuals expected to be most highly exposed to radiation or radioactive material from the product will exceed the dose to the appropriate organ as specified in Column I of the table in §32.28.

(b) It is unlikely that there will be a significant reduction in the effectiveness of the containment, shielding, or other safety features of the product from wear and abuse likely to occur in normal handling and use of the product during its useful life.

(c) In use and disposal of a single exempt unit and in handling and storage of the quantities of exempt units likely to accumulate in one location during marketing, distribution, installation, and servicing of the product, the probability is low that the containment, shielding, or other safety features of the product would fail under such circumstances that a person would receive an external radiation dose or dose commitment in excess of the dose to the appropriate organ as specified in Column II of the table in §32.28, and the probability is negligible that a person would receive an external radiation dose or dose commitment in excess of the dose to the appropriate organ as specified in Column III of the table in § 32.28. 1

[34 FR 6654, Apr. 18, 1969]

§ 32.28 Same: Table of organ doses.

Part of body	Col-	Col-	Col-
	umn I	umn II	umn III
	(rem)	(rem)	(rem)
Whole body; head and trunk; active blood-forming organs; gonads; or lens of eye Hands and forearms; feet and ankles; localized areas of skin averaged over areas no larg-	0.005	0.5	15
er than 1 square centimeter	0.075	7.5	200
Other organs	0.015	1.5	50

[34 FR 6654, Apr. 18, 1969]

§ 32.29 Conditions of licenses issued under § 32.26: Quality control, labeling, and reports of transfer.

Each person licensed under §32.26 shall:

- (a) Carry out adequate control procedures in the manufacture of the product to assure that each production lot meets the quality control standards approved by the Commission;
- (b) Label or mark each detector and its point-of-sale package so that:
- (1) Each detector has a durable, legible, readily visible label or marking on the external surface of the detector containing:
- (i) The following statement: "CONTAINS RADIOACTIVE MATERIAL";
- (ii) The name of the radionuclide and quantity of activity; and
- (iii) An identification of the person licensed under §32.26 to transfer the detector for use pursuant to §30.20 of this chapter or equivalent regulations of an Agreement State.
- (2) The labeling or marking specified in paragraph (b)(1) of this section is located where its will be readily visible when the detector is removed from its mounting.
- (3) The external surface of the pointof-sale package has a legible, readily visible label or marking containing:
- (i) The name of the radionuclide and quantity of activity:

¹It is the intent of this paragraph that as the magnitude of the potential dose increases above that permitted under normal conditions, the probability that any individual will receive such a dose must decrease. The probabilities have been expressed in general terms to emphasize the approximate nature of the estimates which are to be

made. The following values may be used as guides in estimating compliance with the criteria:

Low—not more than one such failure per year for each 10.000 exempt units distributed.

Negligible—not more than one such failure per year for each one million exempt units distributed